

AMENDMENTS TO THE CLAIMS

1.(Cancelled)

2.(Cancelled)

3.(Currently amended) Free radical emulsion polymerization method ~~Method~~ according to ~~claim 1~~ claim 13, wherein said ~~dimers are~~ dimer is selected from the group consisting of α -methyl vinyl compounds ~~or~~ and α -ethyl vinyl compounds.

4.(Currently Amended) Free radical emulsion polymerization method ~~Method~~ according to ~~claim 2~~ claim 14, wherein said ~~dimers are~~ dimer is selected from the group consisting of α -methyl vinyl compounds ~~or~~ and α -ethyl vinyl compounds.

5.(Currently Amended) Free radical emulsion polymerization method ~~Method~~ according to ~~claim 1~~ claim 13, wherein said dimer is selected from the group consisting of dimers or cross-dimers or α -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyl methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate, methacrylic acid, tert.-butyl methacrylate, isocyanatoethyl methacrylate, meta-isopopenyl- α , α -dimethyl isocyanate (TMI), ω -sulfoxyalkyl methacrylates and alkali salts thereof.

6.(Canceled)

7.(Canceled)

8.(Canceled)

9.(Canceled)

10.(Canceled)

11.(Canceled)

12.(Currently amended) ~~Use of ultrafine~~ Printing plates comprising ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of ~~claim 1~~ claim 13, in a layer arrangement of wherein said printing plates for are selected from the group consisting of computer-to-plate applications, or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.

13.(New) Free radical emulsion polymerization method of a monomer or monomer mixture in a water-based reaction in the presence of a chain transfer agent and of a surfactant, wherein said surfactant is present in a concentration below twice its critical micelle concentration and that said chain transfer agent is a dimer.

14.(New) Free radical emulsion polymerization method according to claim 13, wherein said surfactant is a non-ionic surfactant, present in a concentration versus said monomer or monomer mixture of from 5 up to 25 % by weight.

15.(New) Free radical emulsion polymerization method according to claim 13, wherein said surfactant is an anionic surfactant, present in a concentration versus said monomer or monomer mixture of from 0.05 up to 10 % by weight.

16.(New) Free radical emulsion polymerization method according to claim 13, wherein said surfactant is an anionic surfactant, present in a concentration versus said monomer or monomer mixture of from 0.05 up to 1%, by weight.

17.(New) Free radical emulsion polymerization method according to claim 15, wherein said dimer is a compound selected from the group consisting of α -methyl vinyl compounds and α -ethyl vinyl compounds.


18.(New) Free radical emulsion polymerization method according to claim 16, wherein said dimer is a compound selected from the group consisting of α -methyl vinyl compounds and α -ethyl vinyl compounds.

19.(New) Free radical emulsion polymerization method according to claim 14, wherein said dimer is a compound selected from the group consisting of dimers or cross-dimers of α -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyl methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate, methacrylic acid, tert.-butyl methacrylate, isocyanatoethyl methacrylate, meta-isopopenyl- α,α -dimethyl isocyanate (TMI), ω -sulfoxyalkyl methacrylates and alkali salts thereof.

20.(New) Free radical emulsion polymerization method according to claim 15, wherein said dimer is a compound selected from the group consisting of dimers or cross-dimers or α -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyl methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate, methacrylic acid, tert.-butyl

methacrylate, isocyanatoethyl methacrylate, meta-isopopenyl- α,α -dimethyl isocyanate (TMI), ω -sulfoxyalkyl methacrylates and alkali salts thereof.

21.(New) Free radical emulsion polymerization method according to claim 16, wherein said dimer is a compound selected from the group consisting of dimers or cross-dimers or α -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyi methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate, methacrylic acid, tert.-butyl methacrylate, isocyanatoethyl methacrylate, meta-isopopenyl- α,α -dimethyl isocyanate (TMI), ω -sulfoxyalkyl methacrylates and alkali salts thereof.




22.(New) Free radical emulsion polymerization method according to claim 13, wherein said monomers are selected from the group consisting of derivatives of styrene derivatives, methacrylates, acrylates, methacrylamides, acrylamides, maleimides, vinyl ethers and vinyl esters.

23.(New) Free radical emulsion polymerization method according to claim 22, wherein said derivatives are selected from the group consisting of para-methylstyrene, tert.-butylstyrene, methylmethacrylate, ethylmethacrylate, butylmethacrylate, glycidylmethacryate, hydroxyethylmethacrylate, a-methylstyrene, ethylacrylate, butylacrylate, vinylacetate, vinyl versatate, butadiene, isoprene, acrylonitrile, methacrylonitrile, sulfoethyl methacrylate and its alkali salts, acrylic acid, methacrylic acid, tert-butyl acrylamide, AMPS, N-isopropylacrylamide, itaconic acid, maleic acid,

maleic anhydride, vinylidene chloride, isopropylmethacrylate, dialkyl itaconate, acrylonitrile, methacrylonitrile and vinyl chloride.

24.(New) Free radical emulsion polymerization method according to claim 14, wherein said non-ionic surfactants are selected from the group consisting of alcohol ethoxylates, alkylphenol ethoxylates, polyethylene oxide/polyethylene oxide block copolymers, polyvinyl alcohol, polyvinyl pyrrolidone, sorbitan fatty acid esters or sorbitan ester ethoxylates.



25.(New) Free radical emulsion polymerization method according to claim 15, wherein said anionic surfactants are selected from the group consisting of fatty alcohol sulphates, alkylphenol sulphates, fatty alcohol ether sulphates, fatty alcohol ether sulphates, alkylphenol ether sulphates, alkylbenzene sulphonic acid, alkyl ether carboxylic acid and salts thereof, alkyl sulphosuccinates, alkyl sulphosuccinamates, phosphate esters or α -olefin sulphonates.
